

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A polymeric ultra or microfiltration membrane incorporating PVME wherein the PVME is incorporated in the membrane as a homogeneous or heterogeneous dispersion throughout the membrane.

Claims 2 (original): A polymeric ultra or microfiltration membrane according to claim 1 wherein the PVME is present as a coating on the membrane.

Claim 3 (original): A polymeric ultra or microfiltration membrane according to claim 1 wherein the PVME is present as a coating on the membrane and is incorporated in the membrane as a homogeneous dispersion throughout the membrane

Claims 4 -5 (canceled).

Claim 6 (original): A membrane according to claim 1 wherein the polymeric ultra or microfiltration membrane includes one or more of Halar, PVDF or PP.

Claim 7 (previously presented): A membrane according to claim 1 which is hydrophilic.

Claim 8 (currently amended): A membrane according to claim 1 which has a ~~highly~~ an asymmetric structure.

Claim 9 (previously presented): A membrane according to claim 1 having reduced pore size as a result of the addition of PVME.

Claim 10 (previously presented): A membrane according to claim 1 substantially free from macrovoids.

Claim 11 (previously presented): A membrane according to claim 1 including cross linked PVME.

Claim 12 (original): A polymeric ultra or microfiltration membrane incorporating adsorbed PVME and embedded PVME and wherein adsorbed PVME is cross-linked with embedded PVME.

Claims 13-63 (canceled).

Claim 64 (previously presented): A polymeric ultra or microfiltration membrane according to claim 12 containing PVDF and PVME in a ratio of 0.1:24 to 0.5 to 24.

Claim 65 (previously presented): A polymeric ultra or microfiltration membrane according to claim 12 containing 0.4 to 30 wt% PVME.

Claim 66 (previously presented): A polymeric ultra or microfiltration according to claim 12 which on soaking for 8 hours produces a detectable quantity of PVME.

Claim 67 (previously presented): A polymeric ultra or microfiltration membrane according to claim 12 containing PVME which on soaking for 48 hours produces a leachate having at least 5ppm PVME.

Claim 68 (previously presented): A hydrophobic polymeric ultra or microfiltration membrane according to claim 12 rendered hydrophilic by contacting the membrane with an aqueous or alcoholic solution of PVME with a concentration 0.05 to 5 wt%.

Claim 69 (previously presented): A method of hydrophilising a membrane prepared from a polymeric material, said method including the step of contacting said

polymeric material with a compatible at least partially water soluble polymeric hydrophilising agent, which contains vinylmethyl ether monomers.

Claim 70 (previously presented): A method according to claim 69 wherein the at least partially water soluble polymeric hydrophilising agent is soluble in an amount of at least 5-10g/l at standard temperature and pressure.

Claim 71 (previously presented): A method according to claim 69 wherein the polymeric hydrophilising agent is polyvinylmethyl ether (PVME).

Claim 72 (previously presented): A method according to claim 69 wherein the polymeric hydrophilising agent is a copolymer containing vinylmethyl ether monomer and at least one other co-monomer.

Claim 73 (previously presented): A method according to claim 72 wherein the vinylmethyl ether monomer is present in an amount of at least 50 mole% of the polymeric hydrophilising agent.

Claim 74 (previously presented): A method according to claim 72 wherein the co-monomer is selected from the group consisting of: co-polymerisable acrylate monomers and copolymerisable vinyl monomers.

Claim 75 (currently amended): A method of modifying the hydrophobic/hydrophilic balance of a polymer membrane prepared from a polymeric material, said method including the step of contacting said polymeric material with polyvinylmethyl ether (PVME) to produce a modified polymeric membrane wherein the polymeric membrane is an ultrafiltration membrane or a microfiltration membrane.

Claim 76 (previously presented): A method according to claim 75 wherein the polymeric membrane is coated with PVME.

Claim 77 (canceled).

Claim 78 (previously presented): A method according to claim 75 wherein the polymeric material is a hydrophobic polymer and hydrophobic/hydrophilic balance of the polymer is modified to provide a hydrophilic modified polymeric membrane.

Claim 79 (previously presented): A method according to claim 75 wherein the polymeric material is poly(vinylidene fluoride) (PVDF), poly(ethylene-chlorotrifluoroethylene) (Halar) and poly(propylene) (PP) or mixtures thereof.

Claim 80 (previously presented): A method according to claim 75 wherein the polymeric material is a formed membrane treated with a solution of PVME at a concentration and for a time sufficient to allow PVME saturation of said membrane to take place.

Claim 81 (previously presented): A method according to claim 80 wherein the polymeric material is post treated by soaking in a solution of PVME in ethanol.

Claim 82 (previously presented): A method according to claim 81 wherein the polymeric material is post treated by soaking in a solution of PVME in water.

Claim 83 (previously presented): A method according to claim 75 wherein the concentration of PVME is less than 10%.

Claim 84 (previously presented): A method according to claim 83 wherein the concentration of PVME is greater than 0.1%.

Claim 85 (previously presented): A method according to claim 75 wherein treatment with PVME takes place for between 5 minutes and 16 hours.

Claim 86 (previously presented): A method according to claim 85 wherein

treatment with a solution of PVME is followed by a rinsing stage to remove unbound PVME.

Claim 87 (previously presented): A method according to claim 75 wherein the polymeric material is treated with PVME by means of adding PVME to a membrane dope prior to casting.

Claim 88 (previously presented): A method according to claim 87 wherein the membrane dope is cast via a thermally induced phase separation process.

Claim 89 (previously presented): A method according to claim 88 wherein the membrane dope includes PVME in an amount up to 1 wt%.

Claim 90 (previously presented): A method according to claim 89 wherein the membrane dope is cast via a diffusion induced phase separation process.

Claim 91 (previously presented): A method according to claim 90 wherein the membrane dope includes PVME in an amount higher than 1 wt%.

Claim 92 (previously presented): A method according to claim 90 wherein the PVME is dissolved in a polymer dope/solvent/non-solvent mixture.

Claim 93 (previously presented): A method according to claim 92 wherein the solvent/non-solvent mixture includes a PVME solvent and PVME non-solvent.

Claim 94 (previously presented): A method according to claim 92 wherein the PVME solvent possesses weak polarity.

Claim 95 (previously presented): A method according to claim 92 wherein the PVME solvent is glyceroltriactate.

Claim 96 (previously presented): A method according to claim 93 wherein the PVME non-solvent is strongly polar.

Claim 97 (previously presented): A method according to claim 96 wherein the PVME non-solvent is diethylene glycol, triethylene glycol, 1,4-butanediol or mixtures thereof.

Claim 98 (previously presented): A method according to claim 93 wherein the solvent mixture includes from 40-60% non-solvent.

Claim 99 (previously presented): A method according to claim 98 wherein the solvent mixture includes PVME in an amount of 0.1-2wt%.

Claim 100 (previously presented): A method according to claim 90 wherein the method of casting is a TIPS process further including treatment with a coating solution.

Claim 101 (previously presented): A method according to claim 90 wherein the method of casting is a TIPS process further including treatment with a coating solution which contains a solvent and a non-solvent.

Claim 102 (previously presented): A method according to claim 97 wherein the process is a DIPS process where N-methylpyrrolidone is present as a solvent, and water is present as non-solvent.

Claim 103 (previously presented): A method according to claim 69 wherein PYME is incorporated in the membrane dope and formed into a membrane, and wherein said membrane is further treated with PVME.

Claim 104 (previously presented): A method according to claim 69 wherein the membrane is treated to cross-link incorporated and/or adsorbed PVME.

Claim 105 (previously presented): A method according to claims 104 wherein the method

of cross linking is e-beam.